

**Blair Bell Research Society**  
**Annual Competition Meeting**  
**Abstract Submission Form**



The best 30 abstracts will be published in BJOG. Abstracts must contain original data that have not been previously published.

They should be submitted in the format specified below:

- title, authors and affiliations
- unstructured (i.e just a block of text with no headings)
- no figures or references
- maximum length of 150 words
- underline the name of the presenting author.

The presenting author must be a young investigator or investigator in-training.

### **Fetal kidney growth assessed by MRI**

*Kareen V<sup>1</sup>, Jones NW<sup>2</sup>, Al-Radaideh A<sup>1</sup>, Coyne L<sup>2</sup>, Costigan C<sup>1</sup>, Paus T<sup>1</sup>, Pausova Z<sup>1</sup>, Gowland P<sup>1</sup>, Bugg GJ<sup>2</sup>*

<sup>1</sup>University of Nottingham, <sup>2</sup>Nottingham University Hospitals NHS Trust.

MRI allows measurement of differential fetal organ growth which can be used to characterize the effects of various fetal insults on development. In particular, abnormal early kidney development may be relevant to the pathogenesis of diseases in adulthood. The objective was to demonstrate the benefit of MRI in the assessment of various fetal organ volumes focusing on fetal kidneys. Ethics committee approval was obtained to scan pregnant women with normal or compromised pregnancies. MR examinations were performed between 20 and 40 weeks of pregnancy on 20 subjects. These included 11 normal pregnancies, 1 with diabetes mellitus, 2 with intrauterine growth restriction and 6 subjects were smokers. Some were scanned more than once. Scanning was performed on a 1.5 T Philips Achieva scanner with a phased array body coil. The imaging protocol included T2 single shot fast spin-echo and BTFE. For normal pregnancies total fetal kidney volume increased approximately linearly over the period studied. For abnormal pregnancies the fetal kidney volumes were about 20-30% smaller. In conclusion further work is required to confirm the effects of fetal compromise on kidney and other organ development.

Type of presentation (\*delete as appropriate): POSTER

**Abstract submission deadline is Monday 3<sup>rd</sup> November 2008. Any abstracts received after this date will not be accepted.**

**Abstracts should be submitted as Word document (2003 compatible) via email to:-  
Dr Ian Crocker**